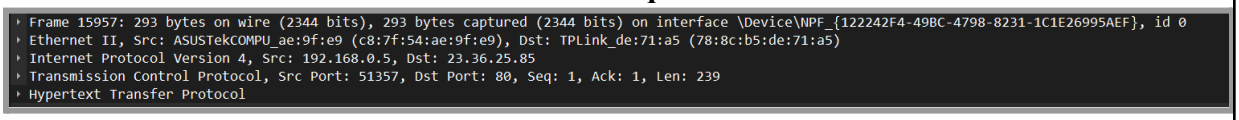
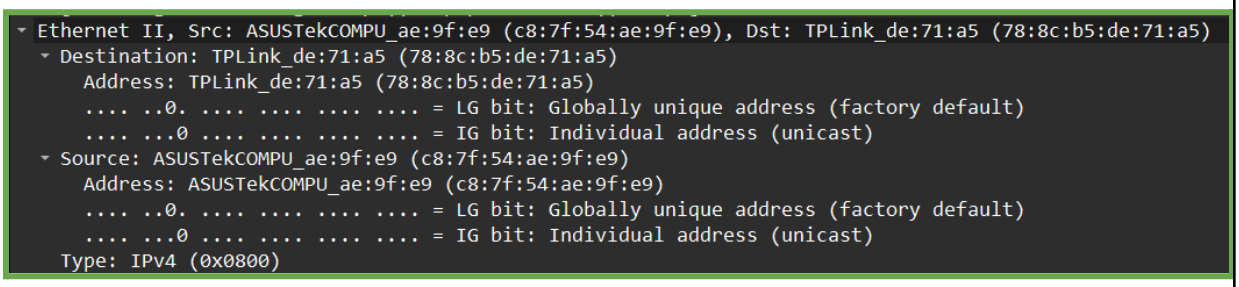
HTTP Request

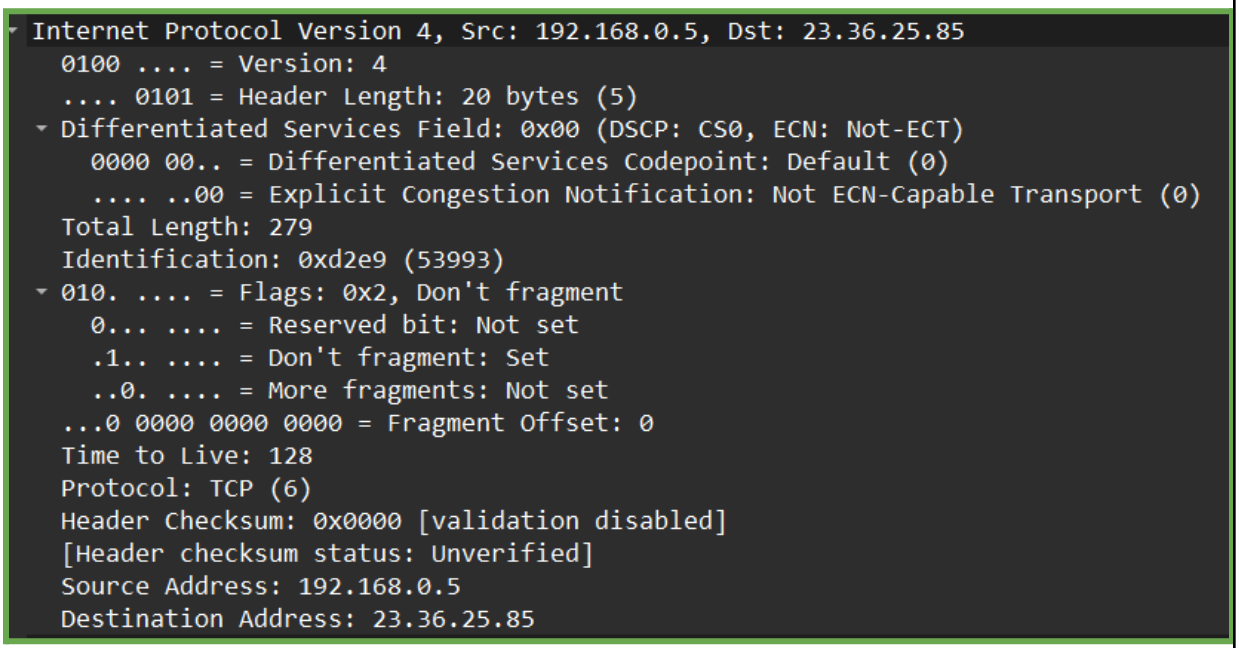


2. Data Link Layer



Here, we can see,
Src Mac address: c8:7f:54:ae:9f:e9
Dst Mac address: 78:8c:b5:de:71:a5
And the type is IPv4

3. Network Layer



Here we can see,
This is IP version 4
The source IP address: 192.168.0.5
The destination IP address: 23.36.25.85
This is using TCP and the protocol number 6 in the IP header.

4. Transport Layer

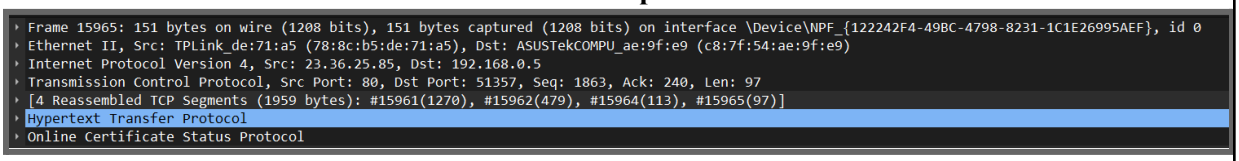
```
▾ Transmission Control Protocol, Src Port: 51357, Dst Port: 80, Seq: 1, Ack: 1, Len: 239
    Source Port: 51357
    Destination Port: 80
    [Stream index: 143]
  ▾ [Conversation completeness: Complete, WITH_DATA (31)]
      ..0. .... = RST: Absent
      ...1 .... = FIN: Present
      .... 1... = Data: Present
      .... .1.. = ACK: Present
      .... ..1. = SYN-ACK: Present
      .... ...1 = SYN: Present
      [Completeness Flags: ·FDASS]
    [TCP Segment Len: 239]
    Sequence Number: 1    (relative sequence number)
    Sequence Number (raw): 1019411586
    [Next Sequence Number: 240    (relative sequence number)]
    Acknowledgment Number: 1    (relative ack number)
    Acknowledgment number (raw): 2706884587
    0101 .... = Header Length: 20 bytes (5)
  ▾ Flags: 0x018 (PSH, ACK)
      000. .... .... = Reserved: Not set
      ...0 .... .... = Accurate ECN: Not set
      .... 0... .... = Congestion Window Reduced: Not set
      .... .0.. .... = ECN-Echo: Not set
      .... ..0. .... = Urgent: Not set
      .... ...1 .... = Acknowledgment: Set
      .... .... 1... = Push: Set
      .... .... .0.. = Reset: Not set
      .... .... ..0. = Syn: Not set
      .... .... ...0 = Fin: Not set
      [TCP Flags: ·······AP···]
    Window: 1026
    [Calculated window size: 262656]
    [Window size scaling factor: 256]
    Checksum: 0xf22f [unverified]
    [Checksum Status: Unverified]
    Urgent Pointer: 0
  ▾ [Timestamps]
      [Time since first frame in this TCP stream: 0.010570000 seconds]
      [Time since previous frame in this TCP stream: 0.000194000 seconds]
  ▾ [SEQ/ACK analysis]
      [iRTT: 0.010376000 seconds]
      [Bytes in flight: 239]
      [Bytes sent since last PSH flag: 239]
    TCP payload (239 bytes)
```

Here we can see,
Source port: 51357
Destination port: 80
Sequence number: 1 which is the number used to ensure the data is received in order
Acknowledgment number: 1 which is the number that confirms receipt of the data
Len: 239 bytes

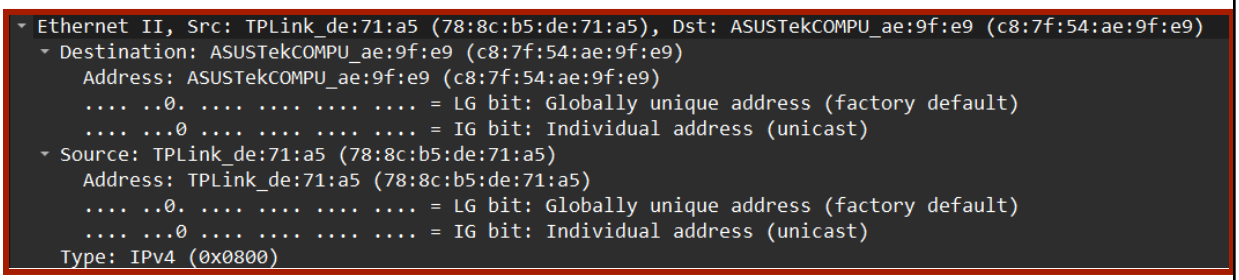
7. Application Layer

Here we can see,
Method: Get
URL: maybe this is encrypted
Request version: HTTP/1.1
Then header line

HTTP Response

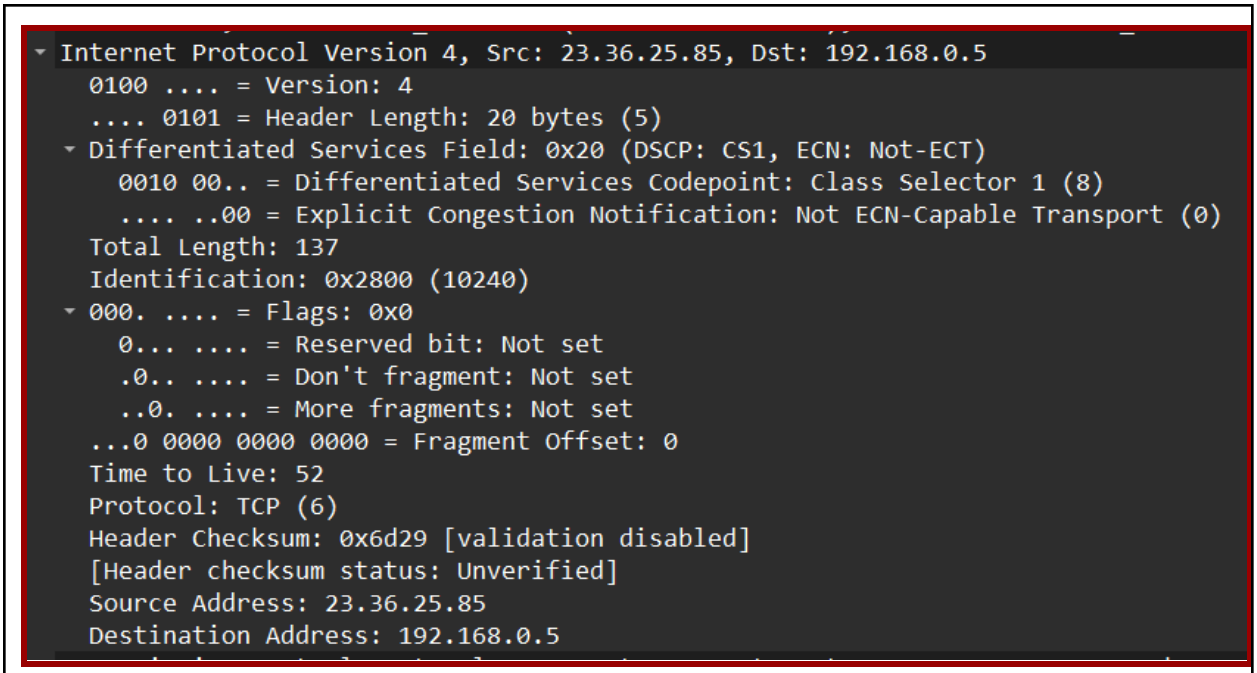


2. Data Link Layer



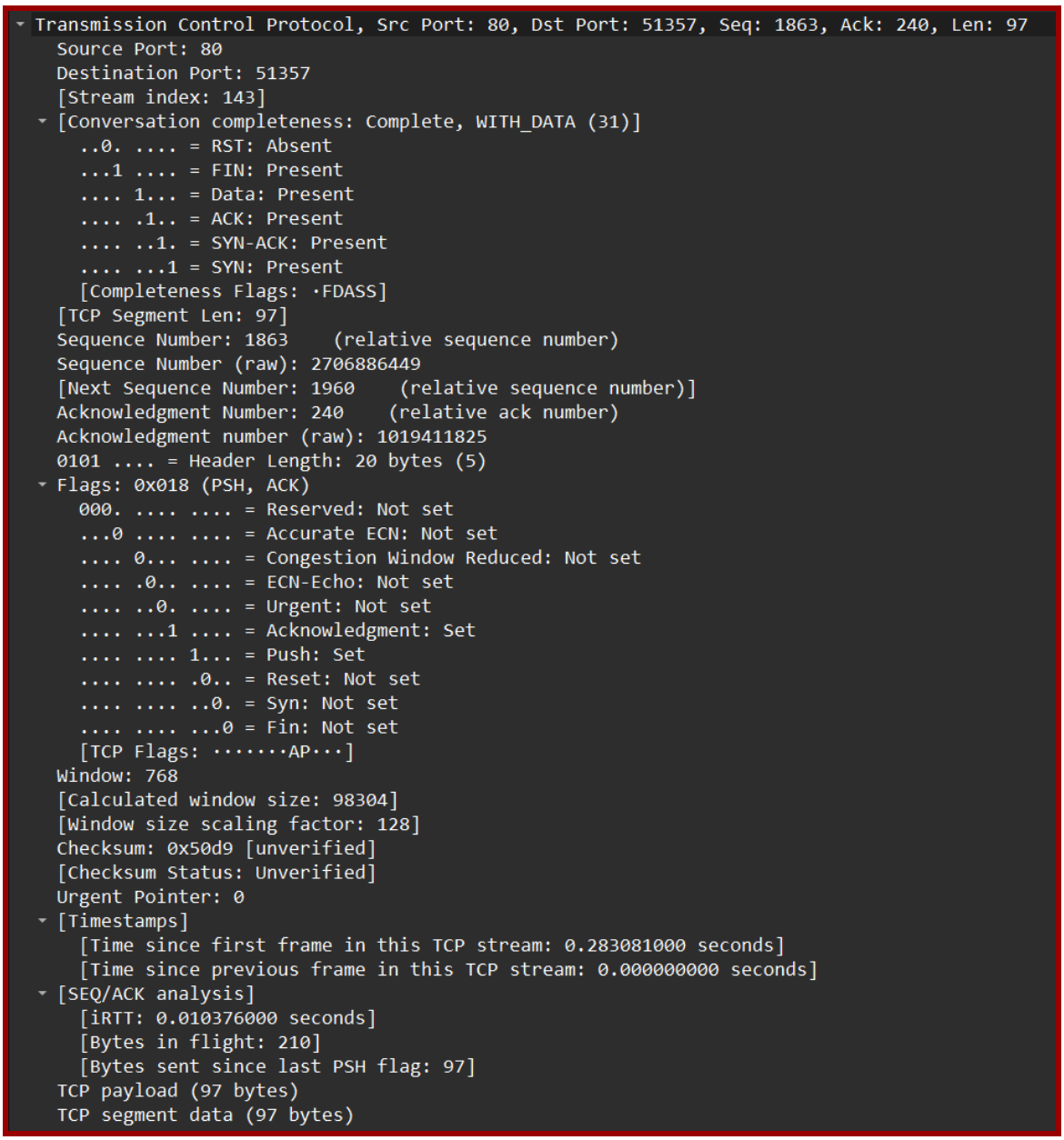
This is an IPV4 packet that shows Src and Dst MAC addresses. The Src and Dst are opposite to HTTP requests.

3. Network Layer



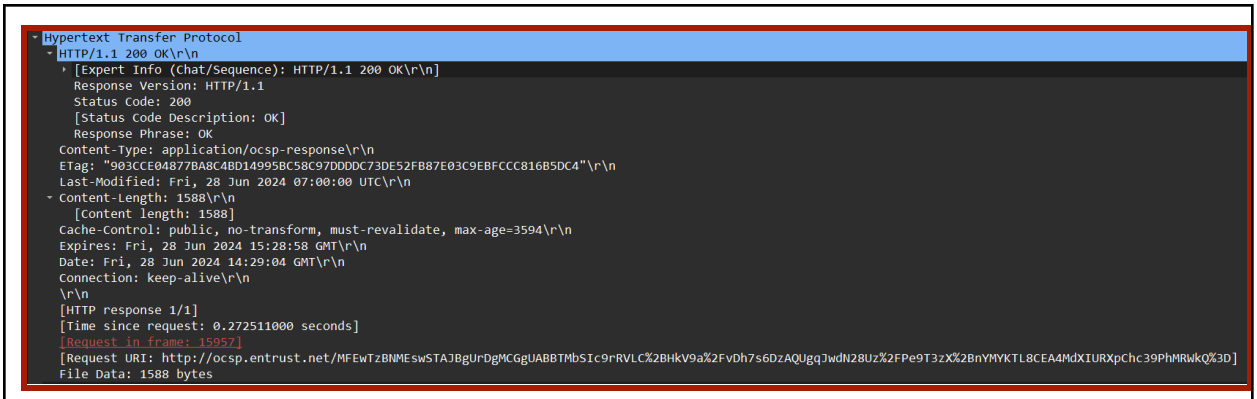
Here we can see IP address, TCP protocol and identification number.

4. Transport Layer



We can see TCP details, port number, Ack no, Seq no etc.

7. Application Layer



Here we can see,
Version: HTTP/1.1
Status Code: 200
Phrase: Ok
Then the header lines.
Others data

We can also see OCSP (Online Certificate Status Protocol)

128

```
At time +2s client sent 128 bytes to 10.1.1.2 port 9
At time +2.00413s server received 128 bytes from 10.1.1.1 port 49153
At time +2.00413s server sent 128 bytes to 10.1.1.1 port 49153
At time +2.00825s client received 128 bytes from 10.1.1.2 port 9
FlowID: 1 (UDP 10.1.1.1/49153 --&gt; 10.1.1.2/9)
Tx Bytes:  156
Rx Bytes:  156
quot;Tx Packets:  1
quot;Rx Packets:  1
quot;Lost Packets:  0
Mean Delay:  0.0041264
Throughput:  69.33333333333333
FlowID: 2 (UDP 10.1.1.2/9 --&gt; 10.1.1.1/49153)
Tx Bytes:  156
Rx Bytes:  156
quot;Tx Packets:  1
quot;Rx Packets:  1
quot;Lost Packets:  0
Mean Delay:  0.0041264
Throughput:  69.33333333333333
```

256

```
At time +2s client sent 256 bytes to 10.1.1.2 port 9
At time +2.00423s server received 256 bytes from 10.1.1.1 port 49153
At time +2.00423s server sent 256 bytes to 10.1.1.1 port 49153
At time +2.00846s client received 256 bytes from 10.1.1.2 port 9
FlowID: 1 (UDP 10.1.1.1/49153 --&gt; 10.1.1.2/9)
Tx Bytes:  284
Rx Bytes:  284
quot;Tx Packets:  1
quot;Rx Packets:  1
quot;Lost Packets:  0
Mean Delay:  0.0042288
Throughput:  126.22222222222223
FlowID: 2 (UDP 10.1.1.2/9 --&gt; 10.1.1.1/49153)
Tx Bytes:  284
Rx Bytes:  284
quot;Tx Packets:  1
quot;Rx Packets:  1
quot;Lost Packets:  0
Mean Delay:  0.0042288
Throughput:  126.22222222222223
```

512

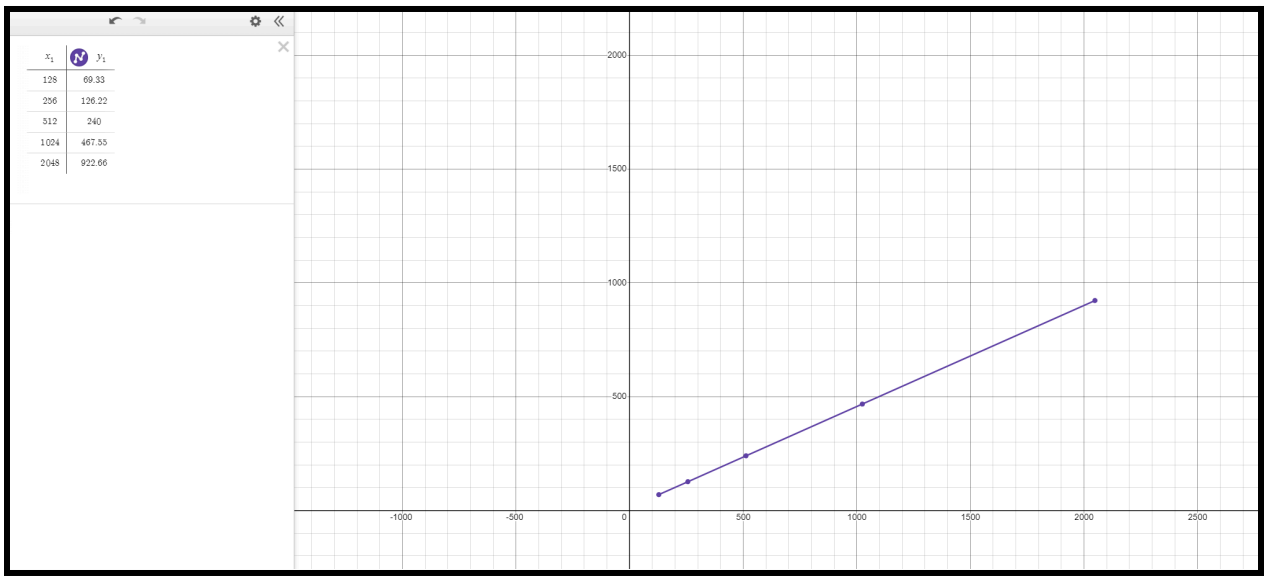
```
At time +2s client sent 512 bytes to 10.1.1.2 port 9
At time +2.00443s server received 512 bytes from 10.1.1.1 port 49153
At time +2.00443s server sent 512 bytes to 10.1.1.1 port 49153
At time +2.00887s client received 512 bytes from 10.1.1.2 port 9
FlowID: 1 (UDP 10.1.1.1/49153 --&gt; 10.1.1.2/9)
Tx Bytes:  540
Rx Bytes:  540
quot;Tx Packets:  1
quot;Rx Packets:  1
quot;Lost Packets:  0
Mean Delay:  0.0044336
Throughput:  240.0
FlowID: 2 (UDP 10.1.1.2/9 --&gt; 10.1.1.1/49153)
Tx Bytes:  540
Rx Bytes:  540
quot;Tx Packets:  1
quot;Rx Packets:  1
quot;Lost Packets:  0
Mean Delay:  0.0044336
Throughput:  240.0
```

1024

```
At time +2s client sent 1024 bytes to 10.1.1.2 port 9
At time +2.00484s server received 1024 bytes from 10.1.1.1 port 49153
At time +2.00484s server sent 1024 bytes to 10.1.1.1 port 49153
At time +2.00969s client received 1024 bytes from 10.1.1.2 port 9
FlowID: 1 (UDP 10.1.1.1/49153 --&gt; 10.1.1.2/9)
Tx Bytes:  1052
Rx Bytes:  1052
quot;Tx Packets:  1
quot;Rx Packets:  1
quot;Lost Packets:  0
Mean Delay:  0.0048432
Throughput:  467.55555555555554
FlowID: 2 (UDP 10.1.1.2/9 --&gt; 10.1.1.1/49153)
Tx Bytes:  1052
Rx Bytes:  1052
quot;Tx Packets:  1
quot;Rx Packets:  1
quot;Lost Packets:  0
Mean Delay:  0.0048432
Throughput:  467.55555555555554
```

2048

```
At time +2s client sent 2048 bytes to 10.1.1.2 port 9
At time +2.00568s server received 2048 bytes from 10.1.1.1 port 49153
At time +2.00568s server sent 2048 bytes to 10.1.1.1 port 49153
At time +2.01136s client received 2048 bytes from 10.1.1.2 port 9
FlowID: 1 (UDP 10.1.1.1/49153 --&gt; 10.1.1.2/9)
Tx Bytes:  2076
Rx Bytes:  2076
quot;Tx Packets:  1
quot;Rx Packets:  1
quot;Lost Packets:  0
Mean Delay:  0.00568
Throughput:  922.6666666666666
FlowID: 2 (UDP 10.1.1.2/9 --&gt; 10.1.1.1/49153)
Tx Bytes:  2076
Rx Bytes:  2076
quot;Tx Packets:  1
quot;Rx Packets:  1
quot;Lost Packets:  0
Mean Delay:  0.00568
Throughput:  922.6666666666666
```



packet size vs Throughput graph